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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,079	03/17/2005	Tatsuya Yoshizawa	041514-5344	1357

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EXAMINER	
MACCHIAROLO, PETER J	

ART UNIT	PAPER NUMBER
2879	

MAIL DATE	DELIVERY MODE
10/10/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/509,079	YOSHIZAWA ET AL.	
	Examiner	Art Unit	
	Peter J. Macchiarolo	2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 15-21* is/are rejected.

7)☒ Claim(s) *4-14 and 22-24* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 September 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *09/28/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 09/28/2004 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the inorganic passivation film (see at least claim 18) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

Claims 4-14 and 22-24 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-14, 16, and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites a support substrate...contains a resin material in the surface of the side facing said organic electroluminescent device." This is not clear. Is the substrate made from resin, or is there an extra layer of resin formed on the surface of the substrate facing the OEL? The Examiner has turned to the instant disclosure for understanding, and has determined from at least figure 4 that a resin film (9) is formed on the surface of the substrate. The claim is read as such for the purpose of examination.

Claims 8, 11, 16 and 18 recite the term, "the back face," however, there is not proper antecedent basis for this claim limitation. The Examiner is interpreting this to refer to the back face of the substrate in claims 8 and 11, and the covering layer shown in at least figure 4 as element 16 in claims 16 and 18.

Claim 2 recites, "said support substrate comprises a color-changing substrate provided with a color-changing film." This is not clear. The Examiner has turned to the instant disclosure for clarification. It appears from paragraphs 4 and 5 of the published specification that a "color-changing substrate with a color-changing film" merely indicates a fluorescent layer on a regular substrate. The claims are read as such for the purpose of examination.

The remaining claims re rejected due to their dependency.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Harvey et al (USPN 5757126; "Harvey").

Regarding claim 1, Harvey discloses at least in figures 2, 3, and 9 an organic electroluminescent display panel comprising: one or more organic electroluminescent devices (12) each comprising a first display electrode (13), one or more organic functional layers (14) each including a light-emitting layer formed from an organic compound, and a second display electrode (15), which are layered sequentially; and a support substrate (11) which carries said organic electroluminescent devices (12), and which has a resin material (17, see also col. 4, line 65 to col. 5 line 5) formed on the surface (top) of the side facing said organic electroluminescent devices (12), wherein said organic electroluminescent display panel further comprises an inorganic barrier film (18) for covering the surface of said support substrate (11) is provided at least between said organic electroluminescent devices (12) and said support substrate (11).

Regarding claim 3, Harvey discloses at least in figures 2, 3, and 9 a second inorganic barrier film (other layer of 18) covering the surface (bottom) of said substrate (11) that is opposite the surface (top) making contact with said organic electroluminescent device.

Claims 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Silvernail (USPN 6576351; "Silvernail").

Regarding claim 15, Silvernail discloses at least in figures 7 and 8, an organic electroluminescent display panel comprising: one or more organic electroluminescent devices (fig. 7; 140) each comprising a first display electrode (not shown), one or more organic functional layers (not shown) each including a light-emitting layer formed from an organic compound, and a second display electrode (not shown), which are layered sequentially; a resin-contained film (121a) which carries said organic electroluminescent devices (140), and which contains a resin material (see at least col. 4, ll. 28-33) in the surface of the side facing said organic electroluminescent devices (140), and a support substrate (110a) which supports said resin-contained film (121a), wherein said organic electroluminescent display panel further comprises a sealing region (fig. 8; 160) which covers an end face (not labeled) of said resin-contained film (121).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harvey in view of Eida et al (USPN 6137459; "Eida").

Regarding claim 2 Harvey is silent to a fluorescent layer located on the substrate.

However, Eida teaches at least in figures 11a and 11b this modification allows for increased light emitting efficiency and color purity.

Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Harvey with the fluorescent layer of Eida to increase light emitting efficiency and color purity.

Claims 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silvernail in view of Inohara (USPN 4357557; "Inohara").

Regarding claims 16 and 17, Silvernail discloses at least in figure 8, said sealing region comprises: a seal housing (130 and 150), which is fastened to said support substrate (110a), and which covers said organic electroluminescent device (140) entirely from the back face.

Silvernail is silent to an inert material, which is filled inside said seal housing or gas trapping material on the inside wall thereof.

However, this is a well known configuration as evidenced by Inohara in at least figure 1, particularly an inert material (nitrogen gas) is filled inside the seal housing (11) to absorb stress produced inside the housing during thermal expansion with a gas trapping material (6) on the inside wall thereof to lengthen the lifetime of the device.

Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Silvernail with an inert and gas trapping material on the inside wall thereof to lengthen the lifetime of the device.

Regarding claim 18, Silvernail is silent to a sealing film.

However, Inohara teaches at least in figure 1, said sealing region comprises a sealing film (13), which comes in contact with said organic electroluminescent device, and covers the entire device (5) from the back face, and this modification allows for moisture-roof sealing of the organic device.

Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Silvernail with the sealing region of Inohara to allow for moisture-proof sealing of the organic device.

Regarding claim 19, Inohara teaches in at least col. 6, ll. 37-42 the sealing film (13) comprises an inorganic passivation film (silicone oil), and said organic electroluminescent device (5) is entirely covered in an airtight condition by said inorganic barrier film (122a of Silvernail) and said sealing film (13 of Inohara).

Therefore, in view of the above discussion, it would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the device of Silvernail with the inorganic passivation film of Inohara to allow for moisture-proof sealing of the organic device.

Regarding claim 20, Silvernail discloses at least in figures 7 and 8 and in col. 4, ll. 28-34, said support substrate (110a) is made of resin, and said display panel further comprises an inorganic barrier film (122c) for covering the surface of said support substrate (110a) is provided at least between said organic electroluminescent devices (140) and said support substrate (110a).

Regarding claim 21, Silvernail discloses at least in figures 7 and 8 a second inorganic barrier film (122b) covering the surface (bottom) of said substrate (110a) that is opposite the surface (top) making contact with said organic electroluminescent device (140).

Conclusion

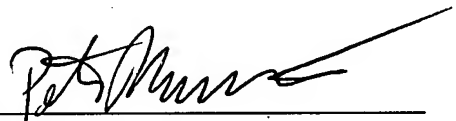
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Macchiarolo whose telephone number is (571) 272-2375. The examiner can normally be reached on 8:30 - 5:00, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar Patel can be reached on (571) 272-2475. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Respectfully submitted,

By 

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